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COMMONWEALTH of VIRGINIA

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August 31, 1998

Commander
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Attn.: Mr. T. A. Reisch, IRP
Code 1822

RE: St. Juliens Creek Annex, Chesapeake, VA
— Supplemental Field Investigation Plan, Landfill B (Site 2) and The Burning
Grounds (Site 5) Dated July, 1998

Dear Mr. Reisch:

Thank you for the opportunity to review and comment on the above referenced document.

The comments below relate only to the referenced supplemental document and not to the previously reviewed RI/FS workplan document dated May, 1997, except where specifically noted. The comments are more or less organized in order of appearance in the plan and apply to the plan as a whole unless a specific section is referenced.

1 Page 4, Section 3.3.1

Section 3.3.1 states that soil borings will extend to groundwater. Please describe the method being used to seal the borings so that an additional channel is not created for contaminants to enter groundwater. By-the-way, what is the depth to groundwater in the vicinity of Landfill B? It is assumed that either a Geoprobe or hand auger will be used to collect the subsurface samples. At depths below 5 feet hand augers become difficult to operate. If groundwater is at 15 feet it is likely that a powered device will need to be utilized for collecting subsurface soil samples. This is not a problem in accessible areas; however in marshy and over grown areas this may be difficult. What will be the plan for such an event? Will the sample be terminated at the depth that the hand auger is no longer suitable? Please indicate this in the plan.

Please provide documentation to justify the selection of 0.25 to 2.0 ft. bgs. to be sampled for use in the BERA for burrowing animals. Some burrowing animals will

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go as deep as 7 feet, and it is common for a groundhog or rabbit to have burrows deeper than 2 feet.

Why are subsurface soil samples being collected from around the perimeter of the landfill for the ecological risk assessment? The whole purpose is to determine ~~the~~ risk ~~from~~ the contaminated area, not areas which may only have been impacted due to waste migration. Will these sample results being used in a contaminant transport model to provide data for the **BERA**?

2 Whole Document

Please refer to the operating manual and sample testing procedures for all instrumentation used in the field such as the Horiba U-10 Water Quality meter. Another option would be to describe the procedures in the text or in an appendix of the document. For equipment such as the Horiba, include a copy of the relevant sections of the manuals or your customized procedures in the work plan.

3 Page 8, Section 3.4.1

These subsurface **soil** samples are suitable for identifying extent of subsurface contamination; however, "perimeter" type samples are not acceptable for use in the ecological risk assessment.

Again, I question the selection of 2 feet as the depth for burrowing animals. Please provide documentation supporting your choice of sample depth.

4. Whole Document

Please describe, in detail, the PID meter scanning procedure and subsequent decision making process. What is a **high** screening reading? I suggest that any screening reading above ambient should be considered a "hit".

5. Page 8, Section 3.4.2

If the **soil** boring is in an area where there is no gravel layer, will the sample be from the 0 to 0.25 ft. depth?

6. General

Samples used to determine the extent of the landfill boundaries and possible migration may be used to provide data for a ~~model~~, but, are not suitable for either an ecological, or human health based risk assessment on-site. Models used to project contaminant concentrations throughout the life of the contaminants, can be used in the risk assessments. The intended use of the data is not always clear in the descriptions of the sampling point selection and associated text.

7. Please provide a detailed description of the slug testing procedure to test for hydraulic conductivity.

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8. General

How much time (minimum) will be allowed between well construction, well development, well slug testing, well tidal variation testing and well sampling.

9. Reference to the Main Body Workplan for the RI May 1997

There have been updates to the EPA Risk Assessment guidance documents as well as to the various ecological and human health risk screening tables. The RI Work Plan references a specific version of these documents. Please note, that for the final RI report, the most current revisions must be used.

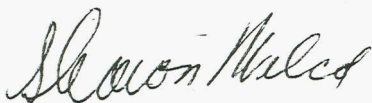
10. Table 3-2

The number of surface soil, surface water and sediment samples indicated on the table do not correspond to the number indicated on figure 3-2 or the text of the document. Please revise this table.

In order to expedite the final review process, I suggest a face to face or teleconference to discuss the items and the proposed responses. —It would create an unnecessary delay if additional comments needed to be made on the response. Certain sections of the plan are sufficiently unclear as to intent and content that a second set of comments should be anticipated.

If you have any questions or to set up a conference, please contact me at the numbers below.

Very truly,



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CC: Rob Thompson, Region III, EPA
file: - 1998 - St. Julien's Creek- Sites 2 & 5
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